

Title (en)
HERMETICALLY SEALED GAS HEATER AND CONTINUOUS HEATING FURNACE USING HERMETICALLY SEALED GAS HEATER

Title (de)
HERMETISCH ABGEDICHTETER GASHEIZOFEN UND DURCHLAUFVERBRENNUNGSOVEN MIT HERMETISCH ABGEDICHTETEM GASHEIZOFEN

Title (fr)
RÉCHAUFFEUR DE GAZ DE TYPE FERMÉ AINSI QUE FOUR CONTINU METTANT EN OEUVRE UN TEL RÉCHAUFFEUR

Publication
EP 2738464 A4 20150318 (EN)

Application
EP 12817071 A 20120723

Priority
• JP 2011163866 A 20110727
• JP 2012068583 W 20120723

Abstract (en)
[origin: US2014106288A1] A hermetically sealed gas heater (110) includes a heater main body, an introduction hole (132) configured to introduce a fuel gas into the heater main body, a combustion chamber (136) configured to combust the fuel gas flowing from introduction hole, and a discharge section (138) into which an exhaust gas generated by combustion in the combustion chamber is guided. The heater main body includes a radiation surface (140) heated by the exhaust gas flowing through the discharge section and configured to transfer radiant heat to a heating target (156). An ejection port (142a) configured to partially or entirely eject the exhaust gas to the heating target is formed at the radiation surface.

IPC 8 full level
F23D 14/12 (2006.01); **F23D 14/14** (2006.01); **F23D 14/70** (2006.01)

CPC (source: EP KR US)
F23C 3/00 (2013.01 - EP KR US); **F23D 14/02** (2013.01 - EP KR US); **F23D 14/06** (2013.01 - EP KR US); **F23D 14/12** (2013.01 - KR);
F23D 14/125 (2013.01 - EP KR US); **F23D 14/66** (2013.01 - EP KR US); **F23D 14/70** (2013.01 - EP KR US); **F24H 3/105** (2013.01 - EP KR US);
F27B 9/068 (2013.01 - KR US); **F27B 9/10** (2013.01 - EP KR US); **F27B 9/28** (2013.01 - EP KR US); **F27B 9/36** (2013.01 - EP KR US);
F27D 99/0001 (2013.01 - EP KR US); **F23D 2900/00003** (2013.01 - EP KR US); **F27D 2099/0011** (2013.01 - EP KR US);
Y02E 20/34 (2013.01 - EP KR US)

Citation (search report)
• [XY] US 3228614 A 19660111 - BAUER KONRAD E
• [X] US 4569328 A 19860211 - SHUKLA KAILASH C [US], et al
• [XY] US 3847536 A 19741112 - LEPAGE L
• [A] US 2002045145 A1 20020418 - CARBONE PHILIP C [US], et al
• [A] JP 2007212082 A 20070823 - ISHIKAWAJIMA HARIMA HEAVY IND, et al
• See references of WO 2013015240A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
US 2014106288 A1 20140417; US 9488383 B2 20161108; CN 103688109 A 20140326; CN 103688109 B 20160608; EP 2738464 A1 20140604;
EP 2738464 A4 20150318; JP 2013029217 A 20130207; JP 5961941 B2 20160803; KR 101544860 B1 20150817; KR 20140004791 A 20140113;
TW 201314132 A 20130401; TW I527999 B 20160401; WO 2013015240 A1 20130131

DOCDB simple family (application)
US 201314138299 A 20131223; CN 201280036560 A 20120723; EP 12817071 A 20120723; JP 2011163866 A 20110727;
JP 2012068583 W 20120723; KR 20137031392 A 20120723; TW 101126580 A 20120724